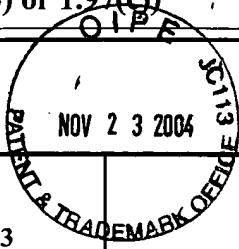


11/24/04

JFW

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))Docket No.
15436.170.1In Re Application Of: **Deng et al.**Serial No.
10/695,057Filing Date
October 28, 2003Examiner
UnknownGroup Art Unit
2828Title: **WIDE TEMPERATURE RANGE VERTICAL CAVITY SURFACE EMITTING LASER**Address to:
Assistant Commissioner for Patents
Washington, D.C. 20231**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

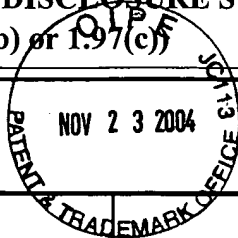
37 CFR 1.97(c)

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:
- ☐ the statement specified in 37 CFR 1.97(e);
- OR**
- ☐ the fee set forth in 37 CFR 1.17(p).

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.
15436.170.1

In Re Application: Deng et al.



Serial No.
10/695,057

Filing Date
October 28, 2003

Examiner
Unknown

Group Art Unit
2828

WIDE TEMPERATURE RANGE VERTICAL CAVITY SURFACE EMITTING LASER

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of _____ is attached.
- ☒ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 23-3178 as described below. A duplicate copy of this sheet is enclosed.
- ☐ Charge the amount of _____
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.

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I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (F

(Date)

Signature

Typed or Printed Name of Person Signing Certificate

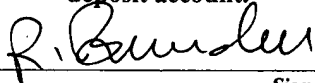
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as first class mail under 37 C.F.R. 1.8 and is
addressed to the Assistant Commissioner for Patents,
Washington, D.C. 20231.


Signature of Person Mailing Correspondence

Chris Jensen
Typed or Printed Name of Person Mailing Certificate

*This certificate may only be used if paying by deposit account.



Signature

Dated: November 23, 2004

R. BURNS ISRAELSEN

Reg. No. 42,685

Customer No. 022913

CC:

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)Applicant(s): **Deng et al.**

Docket No.

15436.170.1

Serial No.

10/695,057

Filing Date

October 28, 2003

Examiner

Unknown

Group Art Unit

2828Invention: **WIDE TEMPERATURE RANGE VERTICAL CAVITY SURFACE EMITTING LASER**

I hereby certify that this **Information Disclosure Statement; PTO Form 1449; seven (7) references; postcard**
(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under
37 CFR 1.10 in an envelope addressed to: The Commissioner of Patents and Trademarks, Washington, D.C.

20231-0001 on **November 23, 2004**
(Date)

Kristine Blust

(Typed or Printed Name of Person Mailing Correspondence)

(Signature of Person Mailing Correspondence)

EV524684538US

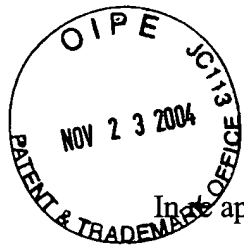
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EXPRESS MAIL NO. EV524684538US

PATENT APPLICATION

Docket No: 15436.170.1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In application of

Deng et al.

Serial No.: 10/695,057

Confirmation No.: 5980

Filed: October 28, 2003

For: WIDE TEMPERATURE RANGE VERTICAL
CAVITY SURFACE EMITTING LASER

Examiner: Unknown

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INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § 1.97

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). While no representation is made that any of these references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record

believes that the enclosed art is the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each of the listed references or relevant portion thereof is also enclosed.

Since all listed references are either in the English language or are accompanied by a translation into English, no concise explanation of relevance is required under 37 C.F.R. § 1.98(a)(3).

DATED November 23, 2004.

Respectfully submitted,



R. BURNS ISRAELSEN
Attorney for Applicant
Registration No. 42,685
Customer No. 022913
Telephone: (801) 533-9800

RBI: kjb
KJB0000004807V001

(Use several sheets if necessary)

15436.170.1

10/695,057

Deng et al.

October 28, 2003

2828

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

Article entitled "Highly Efficient Vertical-Cavity Surface-Emitting Lasers Optimized for Low-Temperature Operation", dated August 1995, IEEE Photonics Technology Letters, Vol. 7, No. 8, pages 851-853, by E. Goobar, M.G. Peters, G. Fish, and L.A. Coldren

Article entitled "Low-Temperature (10-300 K) Characterization of MOVPE-Grown Vertical-Cavity Surface-Emitting Lasers", dated October 1995, IEEE Photonics Technology Letters, Vol. 7, No. 10, pages 1110-1112, by L.A. Hornak, J.C. Barr, W.D. Cox, K.S. Brown, R.A. Morgan, and M.K. Hibbs-Brenner

Article entitled "Cryogenic Operation of AlGaAs-GaAs Vertical-Cavity Surface-Emitting Lasers at Temperatures from 200 K to 6 K, dated March 1996, IEEE Photonics Technology Letters, Vol. 8, No. 3, pages 316-318, by G. Goncher, Bo Lu, Wen-Lin Luo, Julian Cheng, S. Hersee, S.Z. Sun, R.P. Schneider, and J.C. Zolper

Article entitled "Temperature Sensitivity of 1.54 μm Vertical-Cavity Lasers with an InP-Based Bragg Reflector", dated October 1997, IEEE Journal of quantum Electronics, Vol. 33, No. 10, pages 1839-1845, by Stefan Rapp, Joachim Piprek, Klaus Streubel, Janos Andre and J. Wallin

DATE CONSIDERED

SHEET 2 OF 2